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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/578,023

Applicant(s)

DEI ET AL.

Examiner

Jose L. Couso

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 and 55-104 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 and 55-104 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date 4/28/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows (see also MPEP 2106):

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

2. Claims 16 and 79 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 16 and 79 define a "system". However, while the preamble defines a "system", which would typically be indicative of an "apparatus", the body of the claim lacks definite structure indicative of a physical apparatus. Furthermore, the specification indicates that the invention may be embodied as pure software, for example, on page 15, lines 3-13. Therefore, the claim as a whole appears to be nothing more than a "system" of software elements, thus defining functional descriptive material per se.

Functional descriptive material may be statutory if it resides on a "computer-readable medium or computer-readable memory". The claim(s) indicated above lack structure, and do not define a computer readable medium and are thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). The scope of the presently claimed invention encompasses products that are not necessarily computer readable, and thus NOT able to impart any functionality of the recited program. The examiner suggests:

1. Amending the claim(s) to embody the program on "computer-readable medium" or equivalent; assuming the specification does NOT define the computer readable medium as a "signal", "carrier wave", or "transmission medium" which are deemed non-statutory; or

2. Adding structure to the body of the claim that would clearly define a statutory apparatus.

Any amendment to the claim should be commensurate with its corresponding disclosure.

Note:

"A transitory, propagating signal ... is not a "process, machine, manufacture, or composition of matter." Those four categories define the explicit scope and reach of

subject matter patentable under 35 U.S.C. § 101; thus, such a signal cannot be patentable subject matter." (*In re Nuijten*, 84 USPQ2d 1495 (Fed. Cir. 2007)).

Should the full scope of the claim as properly read in light of the disclosure encompass non-statutory subject matter such as a "signal", the claim as a whole would be non-statutory. Should the applicant's specification define or exemplify the computer readable medium or memory (or whatever language applicant chooses to recite a computer readable medium equivalent) as statutory tangible products such as a hard drive, ROM, RAM, etc, as well as a non-statutory entity such as a "signal", "carrier wave", or "transmission medium", the examiner suggests amending the claim to include the disclosed tangible computer readable storage media, while at the same time excluding the intangible transitory media such as signals, carrier waves, etc.

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows (see also MPEP 2106):

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in

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memory held statutory product-by-process claim) with Warner, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

4. Claims 1-15 and 55-78 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 1-15 and 55-78 appear to define an apparatus using "means plus function" claim language. However, the specification does not disclose corresponding physical structure associated with each claim element, and the specification does indicate that the invention may be embodied as pure software, for example, on page 15, lines 3-13. Therefore, the claim as a whole appears to be nothing more than a collection of software elements, thus defining functional descriptive material per se.

Functional descriptive material may be statutory if it resides on a "computer-readable medium or computer-readable memory". The claim(s) indicated above lack structure, and do not define a computer readable medium and are thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). The scope of the presently claimed invention encompasses products that are not necessarily computer readable, and thus NOT able to impart any functionality of the recited program. The examiner suggests:

1. Amending the claim(s) to embody the program on "computer-readable medium" or equivalent; assuming the specification does NOT define the computer readable medium as a "signal", "carrier wave", or "transmission medium" which are deemed non-statutory (refer to "note" below); or

2. Pointing out where the corresponding structure can be found in the specification that would clearly be indicative of a statutory apparatus, in a 112 6th paragraph sense.

Any amendment to the claim should be commensurate with its corresponding disclosure.

Note: "A transitory, propagating signal ... is not a "process, machine, manufacture, or composition of matter." Those four categories define the explicit scope and reach of subject matter patentable under 35 U.S.C. § 101; thus, such a signal cannot be patentable subject matter." (*In re Nuijten*, 84 USPQ2d 1495 (Fed. Cir. 2007)).

Should the full scope of the claim as properly read in light of the disclosure encompass non-statutory subject matter such as a "signal", the claim as a whole would be non-statutory. Should the applicant's specification define or exemplify the computer readable medium or memory (or whatever language applicant chooses to recite a computer readable medium equivalent) as statutory tangible products such as a hard drive, ROM, RAM, etc, **as well as** a non-statutory entity such as a "signal", "carrier wave", or "transmission medium", the examiner suggests amending the claim to include the disclosed tangible computer readable storage media, while at the same time excluding the intangible transitory media such as signals, carrier waves, etc.

5. Claims 17-41 and 80-104 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent¹ and recent Federal Circuit decisions² indicate that a statutory “process” under 35 U.S.C. 101 must (1) be tied to another statutory category (such as a particular apparatus), or (2) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform underlying subject matter nor positively tie to another statutory category that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. For example the contents distribution method including steps of outputting, transmission and encoding is of sufficient breadth that it would be reasonably interpreted as a series of steps completely performed mentally, verbally or without a machine. The Applicant has provided no explicit and deliberate definitions of “outputting”, “transmission” and “encoding” to limit the steps and the claim language itself is sufficiently broad to read on a person mentally going through the steps.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

¹ *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

² *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

7. Claims 1-30, 33-39, 55-65, 71-74, 79-93 and 96-102 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagashima et al. (U.S. Patent No. 6,275,988).

With regard to claims 1, 17, 55 and 80, Nagashima describes a data output device for outputting encoded data (see figure 31, element 111 and refer for example to column 35, lines 62-63), and a transmitting device for transmitting the encoded data outputted from the data output device (see figure 31, element 100 and refer for example to column 34, lines 38-39), wherein the data output device outputs data encoded by hierarchical encoding as the encoded data (refer for example to column 6, lines 25-27); and the transmitting device transmits at least a part of data of at least one layer among the data encoded by the hierarchical encoding (refer to column 8, lines 39-42).

As to claims 2, 18, 56 and 81, Nagashima describes wherein the data output device outputs the data encoded by the hierarchical encoding by separating it to respective encoded data of each layer and the transmitting device transmits each of the encoded data individually by each layer (refer for example to column 7, lines 21-42).

In regard to claims 3, 19, 57 and 82, Nagashima describes wherein the transmitting device transmits at least a part of referred-information encoded data of at least one layer among the data encoded by the hierarchical encoding (refer for example to column 7, lines 21-42).

With regard to claims 4, 20, 58 and 83, Nagashima describes wherein the transmitting device transmits, among the data encoded by the hierarchical encoding a) at least a part of encoded data of one layer and b) at least a part of referred-information encoded data of at least one layer among remaining layers (column 7, lines 21-42).

As to claims 5, 21, 59 and 84, Nagashima describes wherein the transmitting device transmits, among the data encoded by the hierarchical encoding a) at least a part of referred-information encoded data of one layer, and b) at least a part of encoded data of at least one layer among remaining layers (refer to column 7, lines 21-42).

In regard to claims 6, 23, 60 and 85, Nagashima describes wherein the transmitting device comprises a transmission managing unit, wherein the transmission managing unit controls quality and stability and/or confidentiality of distribution contents on the contents distributing apparatus side through controlling at least one of number of the encoded data to be transmitted, hierarchy of the encoded data, distribution target of a cipher key, encryption method, and degree of encryption (refer for example to column 20, lines 14-67, the claim recites various elements in the alternative, so the examiner has only addressed one element).

With regard to claims 7, 22, 61 and 86, Nagashima describes wherein, when performing data transmission of a plurality of pieces of encoded data with a time difference provided therebetween, the transmission managing unit changes a compression rate of following encoded data with respect to a compression rate of preceding encoded data with the time difference (refer to column 22, lines 50-58).

As to claims 8, 24, 62 and 87, Nagashima describes wherein the transmission managing unit selects the compression rate in accordance with a distribution rate and/or condition of a transmission line (refer for example to column 22, lines 31-65).

In regard to claims 9 and 63, Nagashima describes wherein the transmission managing unit selects whether or not to transmit at least a part of the encoded data in accordance with the distribution rate and/or the condition of the transmission line (refer for example to column 22, lines 31-65).

With regard to claims 10, 25, 64 and 88, Nagashima describes wherein the transmitting device performs data transmission including encoded data of layers higher than hierarchy of the data to be transmitted (refer for example to column 7, lines 21-42).

As to claims 11, 26, 65 and 89, Nagashima describes wherein the transmission managing unit controls the quality and stability of the distribution contents on a contents distributing side through controlling informing target of session information of a session by which the encoded data is transmitted (refer for example to column 20, lines 14-67).

In regard to claims 12, 36, 71 and 99, Nagashima describes a device for receiving encoded data transmitted by a plurality of sessions (refer for example to column 34, lines 45-49); a device for receiving the encoded data received by the receiving device, and discriminating and separating individual encoded data units therefrom and a reconstruction device which extracts encoded data received without a transmission error and a fault from the discriminated and separated encoded data, and reconstructs and outputs encoded data from the extracted encoded data (refer for example to column 24, lines 14-67).

With regard to claims 13, 37, 72 and 100, Nagashima describes wherein, when reconstructing the encoded data, the reconstruction device judges duplication of the

encoded data from identifiers given to encoded data transmission units (refer for example to column 35, lines 11-27).

As to claims 14, 38, 73 and 101, Nagashima describes wherein the reconstruction device judges a compression rate and/or hierarchy of the encoded data from at least one of a) an encoded data receiving session determined in advance, b) encoded data identifying information determined in advance, which is given to the encoded data transmission unit, c) an encoded data receiving session informed by call connection processing, and d) the encoded data identifying information which is given to the encoded data transmission unit and informed by the call connection processing (refer for example to column 35, lines 28-50, the claim recites various elements in the alternative, so the examiner has only addressed one element)).

In regard to claims 15, 39, 74 and 102, Nagashima describes a report transmitting unit for transmitting a receiving state report to inform condition of a transmission line (refer for example to column 1, lines 20-25).

With regard to claims 16 and 79, Nagashima describes a contents distributing apparatus, a contents receiving apparatus, and a communication network for connecting the contents distributing apparatus and the contents receiving apparatus (see figure 31), wherein the contents distributing apparatus comprises a data output device for outputting encoded data, and a transmitting device for transmitting at least a part of data of at least one layer among the data encoded by the hierarchical encoding outputted from the data output device (see figure 31, elements 100 and 111, and refer

to column 6, lines 25-27, column 8, lines 39-42, column 34, lines 38-39, and column 35, lines 62-63); and the contents receiving apparatus comprises a device for receiving encoded data transmitted by a plurality of sessions (refer for example to column 34, lines 45-49); a device for receiving the encoded data received by the receiving device, and discriminating and separating individual encoded data units therefrom and a reconstruction device which extracts encoded data received without a transmission error and a fault from the discriminated and separated encoded data, and reconstructs and outputs encoded data from the extracted encoded data (refer for example to column 24, lines 14-67).

In regard to claims 27 and 90, Nagashima describes wherein the output step comprises at least one of the steps of (a) an input step of first to N-th encoded data; (b) an input step of encoded data, and a generating step of the first to N-th encoded data from data of at least one layer among the encoded data inputted in the input step; (c) an input step of a first encoded data, and a generating step of second to N-th encoded data from data of at least one layer of the first encoded data inputted in the input step; (d) an encoding step of encoding an inputted signal into the first to N-th encoded data; and (e) an encoding step of encoding the inputted signal into the first encoded data, and a generating step of the second to N-th encoded data from data of at least one layer of the first encoded data inputted in the input step (refer to column 7, lines 21-42).

With regard to claims 28 and 91, Nagashima describes wherein, (N+1)-th encoded data is outputted in addition to the N-th encoded data (refer for example to column 7, lines 21-42).

As to claims 29 and 92, Nagashima describes wherein identifiers for identifying data are given to the first to (N+1)-th encoded data (refer for example to column 7, lines 21-42, the header information corresponds to the identifiers).

In regard to claims 30 and 93, Nagashima describes wherein each of the first to (N+1)-th encoded data is transmitted by a different session (refer for example to column 7, lines 21-42, the different layers are sent depending on the amount charged).

In regard to claims 33 and 96, Nagashima describes wherein a contents distributing side controls an informing target of session information of a session by which the encoded data is transmitted (refer for example to column 36, lines 45-65).

With regard to claims 34 and 97, Nagashima describes wherein the first to (N+1)-th encoded data are distributed with a time difference provided therebetween (refer for example to column 7, lines 21-42).

As to claims 35 and 98, Nagashima describes wherein the time difference is set in accordance with condition of a transmission line and/or an encoding compression rate and/or a distribution rate and/or a rule determined in advance (refer for example to column 36, lines 45-65).

8. Claims 1-41 and 55-104 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamaguchi et al. (U.S. Patent No. 6,028,634).

With regard to claims 1, 17, 55 and 80, Yamaguchi describes a data output device for outputting encoded data (see figure 15B, element 1104), and a transmitting device for transmitting the encoded data outputted from the data output device (see figure 15B, element 1105), wherein the data output device outputs data encoded by hierarchical encoding as the encoded data (refer for example to column 1, lines 36-39); and the transmitting device transmits at least a part of data of at least one layer among the data encoded by the hierarchical encoding (refer to column 2, lines 6-11).

As to claims 2, 18, 56 and 81, Yamaguchi describes wherein the data output device outputs the data encoded by the hierarchical encoding by separating it to respective encoded data of each layer and the transmitting device transmits each of the encoded data individually by each layer (refer for example to column 9, lines 18-28).

In regard to claims 3, 19, 57 and 82, Yamaguchi describes wherein the transmitting device transmits at least a part of referred-information encoded data of at least one layer among the data encoded by the hierarchical encoding (refer for example to column 9, lines 18-28).

With regard to claims 4, 20, 58 and 83, Yamaguchi describes wherein the transmitting device transmits, among the data encoded by the hierarchical encoding a) at least a part of encoded data of one layer and b) at least a part of referred-information encoded data of at least one layer among remaining layers (column 9, lines 18-28).

As to claims 5, 21, 59 and 84, Yamaguchi describes wherein the transmitting device transmits, among the data encoded by the hierarchical encoding a) at least a

part of referred-information encoded data of one layer and b) at least a part of encoded data of at least one layer among remaining layers (refer to column 9, lines 18-28).

In regard to claims 6, 23, 60 and 85, Yamaguchi describes wherein the transmitting device comprises a transmission managing unit, wherein the transmission managing unit controls quality and stability and/or confidentiality of distribution contents on the contents distributing apparatus side through controlling at least one of number of the encoded data to be transmitted, hierarchy of the encoded data, distribution target of a cipher key, encryption method, and degree of encryption (see figure 15B, element 1105, the claim recites various elements in the alternative, so the examiner has only addressed one element, namely controlling the hierarchy of the encoded data).

With regard to claims 7, 22, 61 and 86, Yamaguchi describes wherein, when performing data transmission of a plurality of pieces of encoded data with a time difference provided therebetween, the transmission managing unit changes a compression rate of following encoded data with respect to a compression rate of preceding encoded data with the time difference (refer to column 32, lines 13-22).

As to claims 8, 24, 62 and 87, Yamaguchi describes wherein the transmission managing unit selects the compression rate in accordance with a distribution rate and/or condition of a transmission line (refer for example to column 32, lines 13-22).

In regard to claims 9 and 63, Yamaguchi describes wherein the transmission managing unit selects whether or not to transmit at least a part of the encoded data in

accordance with the distribution rate and/or the condition of the transmission line (refer for example to column 32, lines 13-22).

With regard to claims 10, 25, 64 and 88, Yamaguchi describes wherein the transmitting device performs data transmission including encoded data of layers higher than hierarchy of the data to be transmitted (refer for example to column 9, lines 18-28).

As to claims 11, 26, 65 and 89, Yamaguchi describes wherein the transmission managing unit controls the quality and stability of the distribution contents on a contents distributing side through controlling informing target of session information of a session by which the encoded data is transmitted (refer for example to column 32, lines 13-22).

In regard to claims 12, 36, 71 and 99, Yamaguchi describes a device for receiving encoded data transmitted by a plurality of sessions, a device for receiving the encoded data received by the receiving device, and discriminating and separating individual encoded data units therefrom, and a reconstruction device which extracts encoded data received without a transmission error and a fault from the discriminated and separated encoded data, and reconstructs and outputs encoded data from the extracted encoded data (refer to column 34, line 8 through column 35, line 7).

With regard to claims 13, 37, 72 and 100, Yamaguchi describes wherein, when reconstructing the encoded data, the reconstruction device judges duplication of the encoded data from identifiers given to encoded data transmission units (refer for example to column 15, lines 10-35).

As to claims 14, 38, 73 and 101, Yamaguchi describes wherein the reconstruction device judges a compression rate and/or hierarchy of the encoded data from at least one of a) an encoded data receiving session determined in advance, b) encoded data identifying information determined in advance, which is given to the encoded data transmission unit, c) an encoded data receiving session informed by call connection processing, and d) the encoded data identifying information which is given to the encoded data transmission unit and informed by the call connection processing (refer to column 34, line 8 through column 35, line 7, and column 15, lines 10-35).

In regard to claims 15, 39, 74 and 102, Yamaguchi describes a report transmitting unit for transmitting a receiving state report to inform condition of a transmission line (refer for example to column 34, line 8 through column 35, line 7).

With regard to claims 16 and 79, Yamaguchi describes a contents distributing apparatus, a contents receiving apparatus, and a communication network for connecting the contents distributing apparatus and the contents receiving apparatus, wherein the contents distributing apparatus comprises a data output device for outputting encoded data, and a transmitting device for transmitting at least a part of data of at least one layer among the data encoded by the hierarchical encoding outputted from the data output device (see figure 15B, elements 1104 and 1105, and refer for example to column 1, lines 36-39 and column 2, lines 6-11); and the contents receiving apparatus comprises a device for receiving encoded data transmitted by a plurality of sessions, a device for receiving the encoded data received by the receiving device, and discriminating and separating individual encoded data units therefrom, and a

reconstruction device which extracts encoded data received without a transmission error and a fault from the discriminated and separated encoded data, and reconstructs and outputs encoded data from the extracted encoded data (refer for example to column 34, line 8 through column 35, line 7).

In regard to claims 27 and 90, Yamaguchi describes wherein the output step comprises at least one of the steps of (a) an input step of first to N-th encoded data; (b) an input step of encoded data, and a generating step of the first to N-th encoded data from data of at least one layer among the encoded data inputted in the input step; (c) an input step of a first encoded data, and a generating step of second to N-th encoded data from data of at least one layer of the first encoded data inputted in the input step; (d) an encoding step of encoding an inputted signal into the first to N-th encoded data; and (e) an encoding step of encoding the inputted signal into the first encoded data, and a generating step of the second to N-th encoded data from data of at least one layer of the first encoded data inputted in the input step (refer to column 9, lines 18-28).

With regard to claims 28 and 91, Yamaguchi describes wherein, (N+1)-th encoded data is outputted in addition to the N-th encoded data (refer for example to column 9, lines 18-28).

As to claims 29 and 92, Yamaguchi describes wherein identifiers for identifying data are given to the first to (N+1)-th encoded data (refer to column 9, lines 18-28).

In regard to claims 30 and 93, Yamaguchi describes wherein each of the first to (N+1)-th encoded data is transmitted by a different session (refer for example to column 9, lines 18-28).

With regard to claims 31 and 94, Yamaguchi describes wherein the first to (N+1)-th encoded data are multiplexed to be transmitted (refer to column 11, lines 12-20).

As to claims 32 and 95, Yamaguchi describes wherein, among the first to (N+1)-th encoded data, at least two pieces of encoded data are multiplexed, and the multiplexed data and remaining encoded data without multiplexing are transmitted, respectively, by different sessions (refer to column 11, lines 12-20).

In regard to claims 33 and 96, Yamaguchi describes wherein a contents distributing side controls an informing target of session information of a session by which the encoded data is transmitted (refer to column 9, lines 18-28).

With regard to claims 34 and 97, Yamaguchi describes wherein the first to (N+1)-th encoded data are distributed with a time difference provided therebetween (refer to column 9, lines 18-28).

As to claims 35 and 98, Yamaguchi describes wherein the time difference is set in accordance with condition of a transmission line and/or an encoding compression rate and/or a distribution rate and/or a rule determined in advance (refer for example to column 32, lines 13-22).

With regard to claims 40 and 103, Yamaguchi describes wherein, in the receiving step, the encoded data is received by securing a buffer size determined by at least one of (a) a receiving buffer size determined in advance, (b) a buffer size informed by call connection processing, and (c) a buffer size calculated based on a contents distributing rate and time-difference setting information, which is set in advance and/or informed by call connection (refer for example to column 10, lines 19-26).

As to claims 41 and 104, Yamaguchi describes an output step of outputting data encoded by hierarchical encoding, a transmission step of transmitting at least a part of data of at least one layer among the data encoded by the hierarchical encoding, a receiving step of receiving encoded data transmitted by a plurality of sessions, a step of discriminating and separating individual encoded data units from the received encoded data (see figure 15B, elements 1104 and 1105, and refer for example to column 1, lines 36-39 and column 2, lines 6-11); and a reconstruction step of extracting encoded data received without a transmission error and a fault from the discriminated and separated encoded data, and reconstructing and outputting the extracted encoded data (refer for example to column 15, line 1 through column 16, line 28).

As to claim 66, Yamaguchi describes an error correction code data transmitting device, wherein the error correction code data transmitting device transmits error correction code data generated from data of at least one layer among the encoded data (refer for example to column 12, lines 30-36).

In regard to claim 67, Yamaguchi describes wherein the transmitting device transmits encoded data and error correction code data individually by different sessions (refer for example to column 12, lines 30-36).

With regard to claim 68, Yamaguchi describes comprising a multiplexed transmitting device, wherein the multiplexed transmitting device multiplexes the encoded data and the error correction code data individually, and transmits the multiplexed data by a same session (refer for example to column 11, lines 12-20).

As to claim 69, Yamaguchi describes the multiplexed transmitting device, wherein the multiplexed transmitting device multiplexes a part of encoded data and error correction code data, and transmits the multiplexed data and the data without multiplexing by respective sessions (refer for example to column 11, lines 12-20).

In regard to claim 70, Yamaguchi describes comprising a device for performing at least one of a routing priority control of per-session transmission lines and a power control of radio transmission lines by a session which transmits at least one of encoded data and error correction code data (refer for example to column 34, line 8 through column 35, line 7).

As to claim 75, Yamaguchi describes wherein the reconstruction device restores, by an error correction code, data in which an error or a fault is generated, and reconstructs the data (refer to column 15, line 1 through column 16, line 28).

In regard to claim 76, Yamaguchi describes wherein the reconstruction device restores multiplexed data in which an error or a fault is generated by an error correction code, and reconstructs the data (refer to column 15, line 1 through column 16, line 28).

With regard to claim 77, Yamaguchi describes wherein the reconstruction device restores data without multiplexing and multiplexed data in which an error or a fault is generated by an error correction code and reconstructs the data (refer for example to column 15, line 1 through column 16, line 28).

As to claim 78, Yamaguchi describes a device for selecting whether or not to receive encoded data based on at least one of error/loss rate of the received data; power that can be used in the receiving apparatus and a setting determined in advance (refer for example to column 15, line 1 through column 16, line 28).

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sasaki, Shiimoto and Kondo et al. all disclose systems similar to applicant's claimed invention.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jose L. Couso whose telephone number is (571) 272-7388. The examiner can normally be reached on Monday through Friday from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Werner, can be reached on (571) 272-7401. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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/Jose L. Couso/
Primary Examiner, Art Unit 2624
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